Country	Kingdom of Nepal
Project	Udaipur Cement Project
Borrower	Government of Kingdom of Nepal
Executing Agency	Udaipur Cement Industries, LTD (UCIL)
Exchange of Notes	July 1987
Loan Agreement	October 1987
Loan Amount	¥18,770 million
Loan Disbursed Amount	¥18,749 million

Project Summary and OECF Portion

This project is to construct a cement plant (800 t/day, clinker base) and related facilities (limestone mine, access roads, ropeway) in Jaljale, Udayapur County, some 140 km east of Kathmandu, the capital of Nepal, in order to handle rapidly rising demand for cement and make Nepal self-sufficient for cement. The ODA loan covers all foreign-currency costs related to the project.

Comparison of Original Plan and Actual	Plan	Actual
(1) Project Scope		
1 Cement Plant	(Process) attached with dry-type suspension preheater	Same as left
	(Clinker production capacity) 800t/day	Same as left
2 Development of milestone mine Improvement of mine	Timber-felling, preparation of flat land, transport of ropeway construction materials and equipment	Same as left
Construction of access roads	Length 26km×Width 3.5**m**	Length 26km×Width 6**m**
Construction of ropeway	Length 13km, 200t/h	Same as left
3 Hiring of consultant Basic design, bidding assistance, execution/management, commissioning	Total 151M/M	211**M/M**
	(Inc. training in Japan) 30M/M	33**M/M**
Technical and management guidance after completion	Total 260M/M	274**M/M**
	(Inc. training in Japan) 60**M/M**	60**M/M**
(2) Implementation Schedule		
Start of construction～ Completion of construction	July 1987 ~ December 1993	July 1987 ~ November 1994
(3) Project Cost		
• Foreign currency portion (OECF portion)	¥18,770 million	¥18,719 million
• Local currency portion	Rp.301 million	Rp. 321 million
Total Project Cost	¥21, 070 million	¥19,961 million
Exchange rate	Rp. 1=¥7.63	Rp. 1=¥3.87

Analysis and Evaluation

(1) Project Scope

The project scope remained practically unchanged from the original plan. However, access roads for transporting materials and equipment required for the project were widened in order to enable use as a general-purpose road by residents, and considering that this change contributed to improving the living environment, it is judged to have been an appropriate change. Moreover, there was also a change related to the number of consultants which was slightly increased, but since this increase was decided in order to recover the delay in the implementation schedule, it is not considered to be a problem.

(2) Implementation Schedule

Various delays were incurred in this project, 14 months for the procurement of materials and equipment, 11 months for the construction of the cement plant, 30 months for the construction of the ropeway, and 11 months for the hiring of consultants. These delays were dealt with by increasing the number of equipment units and workers used on the project, and in the end the delay was minimized.

(3) Project Cost

There was a slight underrun in foreign-currency costs, while there was a slight local-currency cost overrun. So the overall project cost was almost the figure that was originally planned.

(4) Implementation Scheme

The executing agency was the Udaipur Cement Industries, LTD. (UCIL), and the F/S was performed by a Japanese consulting firm, which also provided consulting services through a direct contract. The construction of the plant itself was done by a turnkey contract basis, from the procurement of materials and equipment to construction.

(5) Operations and Maintenance

UCIL is a state-owned enterprise, and therefore its board includes representatives from the Ministry of Technology, the Ministry of Finance, and the Mining Production Office. Actually the operation and maintenance of the plant were performed mainly by staffs under the guidance of the consulting firm at the start of operations, but it is being pointed out that a large percentage of these staffs go to other companies, and there is a low level of job permanence for workmen.

The average monthly production of cement is no higher than about 50% of the production capacity due mainly to unstable power supply and the difficulty of procuring parts. Maintenance inspections of the cement plant are performed periodically everyday, and the plant employs an original system in which all employees participate aiming to implement improvements in productivity, lower costs, and turn out high-quality products.

Project Effects and Impacts

- Handling of rising demand for cement (128,857 t production in 1995)
- Lowering in foreign currency expenditures by raising self-sufficiency for cement
- Creation of new jobs, regional development impact

Notes

Report Date : April 1996